APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,464	07/26/2003	Bruce K. Grant		3240

21552 7590 03/20/2007		EXAMINER
MADSON & AUSTIN		RUTTEN, JAMES D
GATEWAY TOWER WEST		
SUITE 900	ART UNIT	PAPER NUMBER
15 WEST SOUTH TEMPLE		
SALT LAKE CITY, UT 84101	2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/627,464	GRANT, BRUCE K.
	Examiner	Art Unit	
	J. Derek Rutten	2192	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 July 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-29</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-29</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>26 July 2003</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date <u>6/29/05</u>.

4)☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-29 have been examined.

Drawings

2.   Figures 1, 2, 4 should be designated by a legend such as --Prior Art-- because only that

which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37

CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37

CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required corrective

action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3.   The disclosure is objected to because of the following informalities: The Brief

Description of the Drawings section on page 7 of the specification does not contain a description

of Figure 14 as required by 37 CFR 1.74. Appropriate correction is required.

4.   The disclosure is objected to because it contains an embedded hyperlink and/or other

form of browser-executable code (e.g. page 11 lines 28-29). Applicant is required to delete the

embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. Note

that MPEP § 608.01 stipulates:

> Where the hyperlinks and/or other forms of browser-executable codes
> themselves rather than the contents of the site to which the hyperlinks are
> directed are part of applicant's invention and it is necessary to have them
> included in the patent application in order to comply with the requirements of 35

U.S.C. **112**, first paragraph, and applicant does not intend to have these hyperlinks be active links, examiners should not object to these hyperlinks.

However, the hyperlink itself does not appear to be part of the invention, therefore it should be deleted.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   Claims 8-11, 13-21, and 23-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites: "A method for developing, delivering and rendering a network-based computer application on a visual display..." Claims 9-11 and 13-17 are dependent upon parent claim 8. While claim 8 establishes the steps for developing, only claim 12 provides steps interpreted to provide the necessary delivering and rendering. Each of claims 8-11 and 13-17 falls short of actually "developing, delivering *and* rendering a network-based computer application on a visual display," [emphasis added] as required by parent claim 8. Each of the three steps should be present the claims.

Similar to claim 8, independent claims 18 and 28 also recite: "A method for developing, delivering and rendering a network-based computer application on a visual display..." Claims 19-27 are dependent upon claim 18, and claim 29 is dependent upon claim 29. However, only claim 22 provides each of the necessary steps to provide the functionality set forth in the preamble. For similar reasons presented in the discussion of claims 8-11 and 13-17 above, each

of claims 18-21, 23-29 falls short of actually "developing, delivering *and* rendering a network-based computer application on a visual display," [emphasis added] as required by the respective parent claim. Each of the three steps should be present the claims.

7.   Claim 28 recites the limitation "the network communication session" in line 5. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, this limitation will be interpreted as "a network communication session." Claim 29 is rejected as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 1, 2, 6, 12, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Remote scripting using a servlet" by Hatcher (hereinafter "Hatcher"), in view of U.S. Patent 6,714,219 to Lindhorst (hereinafter '219), in view of 6988241 to Guttman et al. (hereinafter "Guttman"), in view of U.S. Patent 5,864,700 to Barton et al. (hereinafter Barton), in view of 6981215 to Lindhorst (hereinafter '215).

In regard to claim 1, Hatcher discloses:

A method for developing, delivering and rendering a network-based computer application on a visual display connected to a network comprising the steps of:

developing a network-based application by a method comprising the steps of:

launching an integrated development environment that includes visual drag and drop capabilities designed to wire application components together; See top of page 2, step 1, e.g. "Microsoft Visual InterDev."

...

creating a bootstrap process document that may be used to initiate the network-based application, which bootstrap process document is written in a computer language that can be interpreted by a client device; See pages 3-4, "Listing 1." This listing shows a document in html code which is interpreted by a client device.

and deploying the network-based application on a computer that is connected to the network; See top of page 4, e.g. "document is loaded."

delivering the network application to a user by a method comprising the steps of:

storing the network-based application at a predetermined network address; See 1st paragraph after abstract on page 1, e.g. "URL"

...

causing the bootstrap process document to execute on the client device and thereby load the network-based application on the client device; See Fig. 1 on page 2.

rendering the network-based application on the visual display of the client device by a method comprising the steps of:

...

causing the at least one pre-built component to be interpreted by the client device; See Fig. 1 on page 2.

...

> continuing to process components until all components have been instantiated
>
> and all events have been registered; and creating a visual representation on the visual
>
> display. See the middle of page 3, e.g. "a single HTML page is created." This HTML
>
> page is then rendered and displayed by the browser as described after the abstract on page
>
> 1.

Hatcher does not expressly disclose:

> using the development environment to define the structural and functional
>
> requirements of the network-based computer application; using the visual drag and drop
>
> capabilities of the development environment to select at least one pre-built component
>
> capable of satisfying one of the requirements of the network-based application, each said
>
> component being written in a device independent computer scripting language; causing
>
> the development environment to create a container document that represents the at least
>
> one selected pre-built component; Note that this grouping is directed to features of the

development environment. Hatcher discloses use of the Microsoft Visual InterDev

development environment. Hatcher does not expressly disclose all the features of this

development environment. However, '219 teaches these features in column 3 lines 8-17,

e.g. "Basically these features include such well-known user-interface features such as

drag-and-drop, WYSIWYG, etc. Developers are allowed to instantiate programming

objects using a visual metaphor." It would have been obvious to one of ordinary skill at

the time the invention was made, to use 219's teaching of drag-and-drop programming

with Hatcher's remote scripting framework in order to simplify the creation of web sites as suggested by '219 (see column 1 line 66 – column 2 line 24).

Hatcher does not expressly disclose: *providing the bootstrap document from the network-based application to a user in response to initiation of a network communication session that identifies the pre-determined network address* and *retrieving at least a part of the network-based application into the client device during the network communication session*. However, Guttman teaches that bootstrap documents are provided from a server to a user. See column 3 line 65 – column 4 line 3, e.g. "received from a server." It would have been obvious to one of ordinary skill at the time the invention was made, to use Guttman's teaching of providing web documents with Hatcher's bootstrap document in order to view the document from within a user's browser as suggested by Guttman (see column 3 lines 65-67).

Hatcher does not expressly disclose satisfying dependencies. However, Barton teaches:

determining whether the interpreted component has a dependency that has not been satisfied; See column 3 lines 5-15, e.g. "locating ... a dependency..."

if an unsatisfied dependency exists, deferring the interpretation of the component until all components have been loaded; See column 3 lines 10-15, e.g. "interrupting the processing..." also see column 4 lines 23-33.

if no unsatisfied dependency exists, interpreting the component and creating an instance of the component on the client device; See column 4 lines 31-33, e.g. "instantiation has succeeded."

It would have been obvious to one of ordinary skill at the time the invention was made, to use Barton's teaching of instantiation dependency deferral with Hatcher's rendering in order to enhance error diagnostics and eliminate the need for unbounded memory as suggested by Barton (see column 2 lines 24-63).

Hatcher does not expressly disclose event processing. However, '215 teaches:

upon completion of the interpretation of all components for which no unsatisfied dependency exists and loading of all components, reviewing each deferred component to determine if the component is an event; if the deferred component is not an event, interpreting the component and creating an instance of the component on the client device; See column 32 lines 42-43, e.g. "until the end of the initialization phase." Events are not handled until after all other components are initialized.

if the deferred component is an event, registering the event on the client device in preparation for responding to a predetermined input or condition; See column 32 lines 41-42, e.g. "defer registration." Registration of the event occurs after all other components have been initialized.

It would have been obvious to one of ordinary skill at the time the invention was made, to use '215's teaching of deferred registration with Hatcher's components in order to ensure that event handlers are not fired until after other objects have been constructed and initialized as suggested by '215 (see column 32 lines 45-47).

In regard to claim 2, the above rejection of claim 1 is incorporated. Hatcher does not expressly disclose pre-built components. However, '219 teaches: *wherein the pre-*

built components include at least one of: a request broker; a visual component; a data component; or a non-visual element. See column 3 lines 12-13, also column 12 lines 30-48.

In regard to claim 6, the above rejection of claim 1 is incorporated. Hatcher does not expressly discloses: *wherein the development environment uses a web face markup language.* However, '219 teaches use of a web face markup language. See column 2 line 7, e.g. "DHTML." It would have been obvious to one of ordinary skill at the time the invention was made, to use '219's markup language with Hatcher's development environment in order to develop dynamic web application as suggested by Hatcher (see column 2 lines 6-8).

In regard to claim 12, the rejection below of claim 11 is incorporated. All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 22, the rejection below of claim 21 is incorporated. All further limitations have been addressed in the above rejection of claim 1.

10.   Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher, '219, Barton, Guttman, and '215, as applied to claim 1 above, and further in view of U.S. Patent 5,193,186 to Tamaki et al. (hereinafter "Tamaki").

In regard to claims 3-5, the above rejection of claim 1 is incorporated. Hatcher, '219, Barton, Guttman, and '215 do not expressly disclose: *wherein the bootstrap process document defines a standalone bootstrap process, a sibling bootstrap process,* or

a dependent bootstrap process. However, Tamaki teaches that a standalone process can

be split into a sibling, or parallel process, which can then spawn a dependent, or child

process (see column 1 lines 19-30, e.g. "one process," "parallel," and "child processes."

It would have been obvious to one of ordinary skill at the time the invention was made, to

use Tamaki's teaching of various types of processes with Hatcher's bootstrap document

in order to divide a program and execute them separately as suggested by Tamaki (see

column 1 lines 19-20).

11.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher, '219,

Barton, Guttman, and '215, as applied to claim 1 above, and further in view of U.S. Patent

6,668,325 to Collberg et al. (hereinafter "Collberg").

        In regard to claim 7, the above rejection of claim 1 is incorporated. Hatcher,

'219, Barton, Guttman, and '215 do not expressly disclose: *the step of obfuscating at*

least one identifier prior to delivering the network-based application. However Collberg

teaches code obfuscation. See column 1 line 66 – column 2 line 9. It would have been

obvious to one of ordinary skill at the time the invention was made, to use Collberg's

teaching of obfuscation with Hatcher's application in order to provide software security

as suggested by Hatcher (see column 1 line 67).

12.   Claims 8, 9, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hatcher in view of '219.

In regard to claim 8, all limitations have been addressed in the above rejection of claim 1.

In regard to claims 9 and 13, the above rejection of claim 8 is incorporated. All further limitations have been addressed in the above rejection of claims 1 and 2, respectively.

13.   Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher and '219 as applied to claim 8 above, and further in view of Guttman.

In regard to claims 10 and 11, the above rejection of claim 8 is incorporated. All further limitations have been addressed in the above rejection of claim 1.

14.   Claims 14-16 rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher, '219, and Guttman as applied to claim 10 above, and further in view of Tamaki.

In regard to claims 14-16, the above rejection of claim 10 is incorporated. All further limitations have been addressed in the above rejection of claims 3-5, respectively.

15.   Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher, '219, and Guttman as applied to claim 10 above, and further in view of Collberg.

In regard to claim 17, the above rejection of claim 10 is incorporated. All further limitations have been addressed in the above rejection of claim 7.

16.   Claims 18 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher in view of Guttman.

In regard to claim 18, all limitations have been addressed in the above rejection of claim 1.

In regard to claim 28, all limitations have been addressed in the above rejection of claim 1.

17.   Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher and Guttman as applied to claim 18 above, and further in view of '219.

In regard to claims 19-21, the above rejection of claim 18 is incorporated. All further limitations have been addressed in the above rejection of claim 1.

18.   Claims 23-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher and Guttman as applied to claim 18 above, and further in view of Tamaki.

In regard to claims 23-25, the above rejection of claim 18 is incorporated. All further limitations have been addressed in the above rejection of claims 3-5, respectively.

19.   Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher and Guttman as applied to claim 18 above, and further in view of '219.

In regard to claim 26, the above rejection of claim 18 is incorporated. All further limitations have been addressed in the above rejection of claim 6.

20.   Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher and Guttman as applied to claim 18 above, and further in view of Collberg.

In regard to claim 27, the above rejection of claim 18 is incorporated. All further limitations have been addressed in the above rejection of claim 7.

21.   Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatcher and Guttman as applied to claim 28 above, and further in view of Barton and '215.

In regard to claim 29, the above rejection of claim 28 is incorporated. All further limitations have been addressed in the above rejection of claim 1.
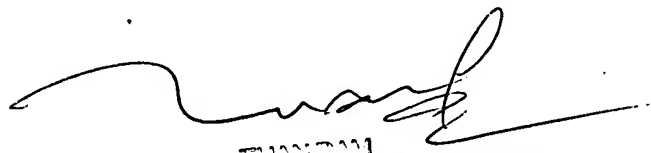
Conclusion

22.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The

examiner can normally be reached on M-F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jdr